

U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

DEPARTMENTAL REGULATION		NUMBER: 5048-001
SUBJECT: Value Engineering -- Implementation of OMB Circular No. A-131	DATE: July 12, 1989	
	OPI: Office of Operations, Procurement Division	

1 PURPOSE

The purpose of this regulation is to implement the policy and procedural requirements of OMB Circular NG.A-131, Value Engineering, in the United States Department of Agriculture.

2 ABBREVIATIONS

OMB - Office of Management and Budget

OO - Office of Operations

PD -Procurement Division

VE - Value Engineering

3 DEFINITION

Value engineering is defined as "an organized effort directed by a person trained in value engineering techniques to analyze the functions of systems, equipment, facilities, services and supplies for the purpose of achieving the essential functions at the lowest life cycle cost consistent with required performance, reliability, quality and safety."

4 POLICY

Each Departmental agency head shall follow the guidance contained in OMB Circular No. A-131; shall establish, manage, and monitor a value engineering program within the respective agencies; and shall direct technical and

procurement personnel to use value engineering techniques to the extent practicable, considering cost and size of a program or project. Each Departmental agency's value engineering program shall, at a minimum, adopt the management and procurement practices contained in paragraphs 4a and 4b of the OMB circular.

5 CONSIDERATIONS FOR APPLYING VE

When value engineering is introduced early into a project or program, the potential for savings is greater than if applied later. The savings are generally greater during the planning, design, and other early phases of project/program development.

While contracts for commercial products frequently result in the delivery of standard off-the-shelf items, the requirements specified in solicitations for the items can be subject to a value engineering review. These reviews obviously should be made before the issuance of a solicitation. However, it is not the intent to "value engineer" commercial products but to review the Government's requirements and specification from a value engineering perspective.

Neither specific types of services, such as R&D, nor specific types of contracts such as incentive fee contracts are exempt on a class basis from VE consideration. Value engineering can be productively applied to some R&D contracts, and to contracts using incentive fee provisions. Value engineering can be used in helping to develop functional, performance specifications, and in turn by contractors to suggest changes either to the specifications or work statement specified in a contract. There is always the potential for a better idea with regard to the tasks or functions to be performed within a particular contract. Incentive type contracts motivate contractors to perform better within specified parameters. Value engineering can remove the parameters and provide additional incentives for higher performance levels.

6 ORGANIZATIONAL PLACEMENT AND FUNCTIONS

Although each Departmental agency head needs to assign an individual to manage and monitor a value engineering program, placement within the organizational structure is a matter of individual discretion for each agency head. The functional details of how the value engineering effort will be performed is also a discretionary matter for individual agencies. However, performance of the function must be consistent with achieving full compliance with the OMB Circular.

7 TRAINING

The head of a Departmental agency should assure that the person who is responsible for the value engineering function receives appropriate training. The level of training should be commensurate with the amount or degree of value engineering opportunities that may be available under agency programs. While courses that are certified by value engineering organizations may be appropriate in some instances, there are a number of non-certified value engineering courses available too. Several are offered by the Department of Defense, and generally may be attended by civilian personnel on a space available basis.

8 REPORTS

In order for this Department to comply with the reporting requirements contained in OMB Circular A-131, Departmental agencies shall submit the following information to the Office of Operations' Procurement Division by November 1 of each year.

a Provide the name, address, and telephone number of the person responsible currently for his or her agency's value engineering program. 00-PD will furnish a consolidated listing to the OMB.

b Prepare and submit the Value Engineering Report of the previous fiscal year's activities. Use the format prescribed in Appendix B.

9 INQUIRIES

Direct inquiries to the Procurement Division, Policy Team, Office of Operations, telephone 447-6206.

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APPENDIX A

OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.
C. 20503

January
26, 1988

TO THE HEADS OF EXECUTIVE DEPARTMENTS AND
ESTABLISHMENTS

SUBJECT: Value Engineering

1. Purpose. The purpose of this Circular is to require the use of value engineering, as appropriate, by Federal Departments and agencies to identify and reduce nonessential procurement and program costs. The Circular requires agency heads to establish and improve their use of value, engineering programs.

2. Background. Value engineering in the Federal Government is a means for some Federal contractors and Government entities to change the plans, designs and specifications for Federal programs and projects. These changes are intended to lower the Government's costs for goods and services and maintain necessary quality levels.

a. Prior Reports. Over the last several years, reports issued by the General Accounting Office (GAO) and many Inspectors General (IGs) have consistently concluded that greater use of value engineering would result in substantial savings to the Government. While some Federal agencies have value engineering programs, other agencies have not utilized value engineering fully. Even for agencies with established programs, the GAO and IG reports conclude that much more can and should be done to realize the benefits of value engineering.

b. Identified Impediments. The impediments that are noted in these reports and that have prevented a greater use of value engineering include:

(1) Failure of senior management to allocate the necessary resources, both in effort and in funds, to

establish and run value engineering programs;

(2) Absence of good criteria for selecting projects and programs for value engineering studies;

(3) Failure to properly perform value engineering studies;

(4) Inadequate attention by agency management to reviewing and implementing the recommendations made in value engineering studies.

c. Other Problems. Many of the problems noted in the GAO and IG reports are attitudinal. A common observation in many of the reports is that there are few incentives to use -value engineering or other cost cutting techniques to save money on fully funded Federal programs and projects. Obviously, programs should be developed, critically reviewed and administered in the most cost effective manner possible. Value engineering and other management techniques must ensure realistic project budgets and identify and remove nonessential capital and operating costs.

3. Definitions.

a. Agency. As used in this Circular, the term "agency" means any executive department, military department, government corporation, government controlled corporation or other establishment of the executive branch of the Federal government.

b. Value Engineering. An organized effort directed by a person trained in

value engineering techniques to analyze the functions of systems, equipment, facilities, services, and supplies for the purpose of achieving the essential functions at the lowest life cycle cost consistent with required performance, reliability, quality and safety.

c. Value Engineering Change Proposal (VECP). A change proposal that is submitted by a contractor under a value engineering incentive or program requirement clause included in a Federal contract.

d. Value Engineering Proposal. A change proposal developed by employees of the Federal Government or contractor value engineering personnel employed by the agency to provide value engineering services for the contract or program.

4. Policy. Agencies shall establish value engineering programs and use value engineering, where appropriate, to reduce nonessential costs and improve productivity. Value engineering programs of agencies shall, at a minimum, provide for the following management and procurement practices.

a. Management Practices. Value engineering programs must be tailored to the mission and organizational structure of each agency. For example, the cost and program/project size usually indicate the potential for value engineering. In most agencies, a relatively few programs or projects comprise the majority of costs and value engineering efforts should be concentrated on these programs and projects. Therefore, agencies shall:

(1) Emphasize, through training, evaluation and other programs the potential

of value engineering to reduce unnecessary posts.

(2) Establish a single entity within the agency to manage and monitor value engineering efforts encourage the use of value engineering and maintain data on the program. This function shall achieve the purposes of this circular. Value engineering training shall be provided to the person responsible for the value engineering function and to other personnel responsible for developing, reviewing and analyzing value engineering actions.

Report and update the name, address and telephone number of the person responsible for each agency's value engineering program to the Office of Federal Procurement Policy, Office of Management and Budget.

(4) Ensure that funds necessary for operating agency value engineering programs are included in annual budget requests, and provide annual summary value engineering program information to the Office of Management and Budget as requested.

(5) Establish criteria and guidelines to identify those programs and projects that are most appropriate for value engineering studies. The criteria and guidelines

should recognize that the potential savings are generally greatest during the planning, -design, and other early phases of project/program development.

(6) Require that files be documented to explain why value engineering studies were, not performed or required for any programs/projects meeting the agency criteria.

(7) Establish guidelines to evaluate and process value engineering proposals.

b. Procurement Practices. Present procurement policies and practices for the use of value engineering are set forth in Parts 48 and 52 of the Federal Acquisition Regulation (FAR). Part 48 provides two basic incentive approaches for using value engineering. The first approach uses a value Engineering Incentive (VEI) clause. In this approach the contractor's participation is voluntary and the contractor uses its resources to develop and submit VECPs. A contract clause provides that when a VECP is accepted any resulting savings are shared with the contractor on a preestablished - usually a percentage - basis set forth in the contract.

The second approach, uses a Value Engineering Program Requirement (VEPR) clause and requires the contractor to conduct a specific value engineering effort within the contract, i.e., an effort to identify and submit to the Government methods for performing more economically. In this second approach, the contractor also shares in any savings resulting from the VECP, but at

a lower percentage rate than under the voluntary approach. This effort generally is directed at the major cost items of a system or project.

The FAR presently permits agency heads to exempt their agencies from using value engineering provisions in contracts. The authority to totally exempt agencies from using value engineering provisions will be rescinded and the FAR will be modified to require that contracting activities include value engineering provisions in contracts except where exemptions are granted on a case-by-case basis or, for specific classes of contracts. One time agency-wide exemptions will no longer be permitted. In addition, agency contracting activities will:

- (1) Actively elicit VECs from contractors.
- (2) Promote value engineering through contractor meetings and the dissemination of promotional and informational literature regarding the value engineering provisions of contracts.
- (3) Establish guidelines for processing value engineering change proposals and require that contract files list all change proposals requiring more than 45 days to accept or reject.
- (4) Document all contract files to explain the rationale for accepting or rejecting value engineering change proposals.

(5) Use the value engineering clauses provided in the FAR for appropriate supply, service, architect-engineer and construction contracts.

(6) Use the value engineering program requirement clause (PAR 52.248-1 alternatives I or II) in initial production contracts for major systems programs and for contracts for research and development except where the controlling program officer determines and documents the file to reflect that such use is not appropriate (see Section 4 of Public Law 93400, as amended (41 U.S.C. 403) for definitions of major systems).

5. Sunset Review. The policies contained in this Circular will be reviewed by the Office of Management and Budget three years from the date of issuance.

6. Inquiries. Further information about this Circular may be obtained by contacting the Office of Federal Procurement Policy, 726 Jackson Place, NW, Washington, DC 20503, Telephone (202) 3954803.

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Agency

Fiscal Year _____

Value Engineering
Report

1. Please estimate the amount of funds invested in VE by your agency in fiscal year 1988.

Funds invested:(1) \$ _____

2. What were the estimated VE savings by your agency in fiscal year 1988? Please separate these savings by in-house savings and contractor-generated savings, if possible. If available, what was the estimated return on investment for each of these categories?

Current FY saving:(2) ROI (3)

In-house: _____

Contractor: _____

3. How many people are now assigned full time to VE in your agency? How many full-time equivalents?

People assigned:

Full-time: _____

FTE: _____

4. Please identify the number of people in your agency receiving eight hours or more of VE training in fiscal year 1988.

Training (people:

8 hours or more: _____

Under 8 hours: _____

5. How many VE proposals did your agency receive in fiscal year 1988? Please report in-house and contractor generated proposals separately, if possible. How many in-house and contractor-generated VE proposals were approved for the same time period?

Proposals received: Approved

In-house origin: _____

Industry origin: _____

- (1) See item 1 on back.
- (2) See item 2 on back.
- (3) See item 3 on back.

1. Funds Invested. Estimates should include salaries and overhead expenses (see item 3 below) of value engineering employees, value engineering training costs, costs for contracting for value engineering services, costs of shared savings payments made to contractors, and any other costs directly associated with your value engineering program.

2. Savings. Savings are defined as a reduction in or the avoidance of expenditures that would have been incurred except for the value engineering program. Savings should be reported in the year incurred; i.e., in the year that the reduction or cost avoidance actually occurs. Recurring savings resulting from a specific V/E effort should be reported for a maximum of three years - the initial year and the two subsequent years. Procurement savings resulting from value engineering efforts should be calculated in accordance with FAR 52.248-1(g).

3. Return on Investment (ROI). ROI is determined by dividing the Government's cost of performing the value engineering function into the savings generated by the function. The Government's cost for the maintenance of an in-house value engineering program should as a minimum include the annual salaries and overhead expenses associated with the maintenance of the V/E function. Overhead expenses (including fringe benefits) may be estimated at 50 percent of salaries. Contract cost should be reported in the year paid.